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Pearson's Life of Hey 13
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AN ACCOUNT OF THE LAST ILLNESS, DEATH, AND *POST-MORTEM* EXAMINATION OF WILLIAM HEY, F.R.S.[1]

BY

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I HAVE been reminded that it is customary for the new President to deliver a short opening address. This duty is one which each year becomes more difficult, because in these days of many opportunities and much talking it is next to impossible to find a topic possessing any element of novelty, and at the same time, the correlative requisites of appropriateness and interest.

In these straits it occurred to me that having on the recent occasion of a change of residence—one of those seismic convulsions that bring all kinds of flotsam and jetsam to the surface—discovered an old document of some interest which had come down to me through three generations of ancestors, I might venture to use it for my present purpose.

This was no less than a brief but original record of the last illness, death and *post-mortem* examination of my great-grandfather, William Hey, F.R.S.

I will now, with your permission, read the memorandum verbatim as I found it: it is in the handwriting of his son, my grandfather.

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[1] Part of address as President of the Yorkshire Branch of the British Medical Association, delivered at Leeds on June 17, 1896.

William Hey, F.R.S., died March 23, 1819, aged 83.

A year before Mr. Hey's last illness he had a severe attack o inflammation in the bowels, which was subdued by general bleeding leeches and other active remedies. When the inflammatory symptoms had subsided, he found himself in a very weak, debilitated state, and was confined to the house upwards of three months.[1]

After this period he generally enjoyed very good health, and was able to go through the duties of his profession wlthout much inconvenience. He was obliged, however, to pay particular attention to his bowels and to keep them open by taking aperient medicine, for whenever he allowed them to be at all confined he felt very uncomfortable Laying his hand upon the lower part of the abdomen, he would sometimes remark, "I am sure something is not right in my bowels."

Besides the regular business of the day, he had been under the necessity of going ten and twelve miles from home on the 7th, 8th, and 9th of March, 1819, and had not paid that attention to his bowels which he was in the habit of doing.

He went to bed very well on Tuesday night, the 9th inst.; but afterwards recollected that, in returning home in the evening, he had felt rather cold and chilly, and thought it was strange, because he had remarked in going that the day was warmer than some days preceding

He awoke with a shivering about five o'clock the following morning and this was very soon followed by pain in the bowels—not severe—accompanied with frequent vomiting; pulse languid and not very quick; tongue furred. Notwithstanding his pulse seemed to forbid the use of the lancet, it was thought advisable to apply a number o leeches to the abdomen.

He had some pills with calomel, antimonial powder and opium combined, solution of sulphate of magnesia mixture with lemon-juice and a compound infusion of senna given to him alternately; purgative glysters were also administered.

On Wednesday night, or early on Thursday morning, he had his bowels freely opened—his stomach became settled, the pain diminished and he felt much better.

On Friday and Saturday he continued to improve but had some hiccough.

On Sunday (March 14th) he felt free from pain, except when the hiccough came on, which was generally excited by any exertion.

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[1] "He had generally enjoyed good health . . . until the year 1808, when on hi return from London he suffered from a disorder of the bowels which reduced him to state of great weakness, and many months elapsed before he was in a capacity of resuming his professional labours.

"In December, 1816, he sustained another most alarming attack of a very painfu and dangerous disease in his bowels. He suspected that ulceration had taken place i the colon or its transverse arch. It pleased God, however, to restore him to his friend and to the public after a confinement of more than three months.

". . . Though capable of going through his professional duties without much inconvenience, yet he was not without uneasy and uncomfortable feelings in the abdomen occasionally; and would say, 'I am sure all is not right in my bowels.' Some months after his illness, alluding to this uneasiness he said, 'I have that about me which will carry me to my grave.'"—Pearson's "Life of Mr. Hey," p. 70.

On Monday morning, when Mr. William Hey saw him, he considered him out of danger, and thought he had nothing to do but recover his strength. He was able to sit up in bed and employ himself in reading.

On Tuesday the 16th he was not so well. The tongue, which was getting moist and clean, was again becoming dry and furred, his pulse more frequent, and all his symptoms were more unfavourable. Wednesday, Thursday and Friday he got gradually worse; his tongue became covered with a black crust, his mouth exceedingly dry and parched—he said the tongue felt like a piece of dry board in his mouth; his strength was so much reduced that he could not bear to converse for any time. His bowels became very loose—the stools very offensive and streaked with blood. Several portions of what appeared at first sight to be small clots of coagulated blood, were found upon careful examination to be of a membranous nature, and no doubt remained on the minds of his medical attendants that they were pieces of the internal coat of the bowel which had sloughed off. He sometimes mentioned having pain in his bowels, but so little did he suffer from it, that when he was asked to point out exactly where it was situated, he would say "I think I have it to seek"—and frequently expressed himself quite free from pain.

The plan of treatment now adopted was to endeavour to support his strength and restrain the looseness. To accomplish the former, tonic medicines with some preparation of ether were given; and his diet was directed to be of a nutritious kind—arrow-root, gruel with wine, beef-tea, broth, rice-gruel and chocolate, were what he chiefly took. To effect the latter, an astringent mixture was given after every loose stool, and anodyne injections were thrown up the rectum.

He continued with little variation either in his symptoms or plan of treatment till Tuesday, the 23rd, on the afternoon of which day he expired. At different periods toward the latter part of his illness his mind wandered—apparently more from debility than actual delirium, because he could generally, if not always, give a rational answer to questions put to him.

Post-mortem Examination.

Upon opening the abdomen a very disagreeable fœtor was emitted; a considerable quantity of the contents of the bowels was found in the cavity. The lower part of the small, and all the large, intestines were of a peculiar dark colour, approaching the appearance of gangrene. The transverse arch of the colon was firmly attached to the upper surface of the spleen, and to that part of the diaphragm immediately under the cartilages of the false ribs on the left side; here it was extremely large, forming a pouch or bag as large as the stomach. Two ulcerated openings of considerable size through the coats of this portion of the colon were found, through which the fæces had passed into the cavity of the abdomen; the coats of the bowel around ye openings were very thin; the villous coat of all the large intestines was in an ulcerated or sloughy state; several portions of membrane similar to what had been evacuated before death were found in ye bowels. The sigmoid flexure of ye colon and ye rectum

were small in diameter, and in two or three places were unnaturall contracted. No coagulable lymph was effused. The stomach an other viscera were healthy.[1]

I venture to think that anyone reading that case for the firs time would say that it is a remarkable one, both in its history—s far as the materials afforded help us to one—and in the course i seems to have run.

It is a matter for regret that the occasion upon which thi communication is made does not permit of discussion, other wise it would have been interesting to hear the opinions c members upon at least two points raised by the notes I hav read: (1) How does the case strike us considered in the ligh of: (*a*) the previous history; (*b*) the symptoms described; (*c* the conditions found *post-mortem*—in other words, "What is th diagnosis?" (2) What, in the light of modern pathology an therapeutics, would suggest itself as the appropriate line of treat ment? Or should we now-a-days make a more successful figh in the endeavour to save so valuable a life?

In the first place we must bear in mind that though Mr. He had nearly reached the completion of his eighty-third year, he was hale and vigorous man, able not only to bear the ordinary routin of a busy life, but that on each of the last three days before h fatal illness he was driven for distances of ten and twelve mil on professional duty.

One year previously, then, we learn that Mr. Hey had had "severe attack" of what the narrator describes as "inflammatio of the bowels," and adds that this attack was "subdued by gener bleeding, leeches and other active remedies." No detaile symptoms are given, nor is the region of the abdomen particu larised where the so-called inflammation existed. That n general peritonitis occurred we may infer from the statemer *post-mortem* that "no coagulable lymph was effused," althoug this was meant to refer to the immediate effects of the last illnes We note, however, that the "transverse arch of the colon wa

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[1] I subsequently found in the "Life of Mr. Hey" by Mr. Pearson, F.R.S., reference to his intestinal troubles which carries their origin back to 1808—*i.e.*, eleve years before his death. These lines therefore may be taken as distinctly relevant to th subject.

rmly attached to the spleen;" this adhesion was probably one of he effects of the previous illness, upon the termination of which ve can scarcely be surprised to read that the patient "found himelf in a very weak, debilitated condition," not altogether unconected with the vigorous treatment employed, nor that he was onfined to the house upwards of three months. But there were ther conditions and lesions found at the autopsy which are ighly suggestive. We see that "the sigmoid flexure of the colon nd the rectum were small in diameter, and in two or three places ere unnaturally contracted."

Does not this read like the record of an old intussusception of ne sigmoid? Cases are on record where undoubted intussusception has been spontaneously resolved, others in young children hich have been reduced by inflation. But the commoner event n cases which recover is the sloughing off of the invaginated ortion and its passage per anum. Yet, I suppose it is a not very ncommon issue for the intussuscepted portion, if small, to ecome matted and consolidated with the containing portion, nd yet remain pervious, so that, in process of time, the thickened alls and the narrowed lumen alone remain in evidence of what as happened, and no longer challenge attention unless carefully ooked for.

And this condition of things is, I take it, quite compatible with fairly comfortable life for many years after, though the patient—s in Mr. Hey's case—"must always pay particular attention to is bowels."

I had a case in the Infirmary many years ago, of a man of 62 before the days when laparotomy for obstructed bowel had ecome a common practice), who was admitted with subacute bstruction that became complete, and he died without operation. t the *post-mortem* an old intussusception near the ileo-cæcal alve was found, which had existed twelve years.

If this be a well-founded guess to hazard, as to the origin of ne obstruction in Mr. Hey's case (though I believe it is rather nusual to meet with intussusception occurring so late in life), e shall find the subsequent developments fall naturally into line. he transverse colon held by adhesions fixed to the diaphragm nd spleen becomes gradually more and more distended in

consequence of the constricted sigmoid. The rectum is never ful and so becomes contracted, whilst the intervening portion o bowel, *i.e.*, the descending colon and upper part of the sigmoi flexure, is gradually expanded until it assumes the form of a "ba resembling the stomach," a condition probably resulting fro chronic retention of fæces extending over many years.

When therefore the usual care was intermitted, which ha become so imperative a necessity, and the unusual strain of thos three days' journeyings had further taxed the already thin walls o the gut, can we wonder at the chain of events ushered in b the rigor on the morning of March 10, and illustrated, at th autopsy a fortnight later, by the discovery of two large ulcer perforating the attenuated pouch at the seat of greatest pressur —"the lower part of the small, and all the large intestine" (wit the exception, I take it, of the rectum) in a state of purple con gestion approaching gangrene. The only surprise we feel is a the aged patient's having survived so long.

Before referring to the treatment, it appears obvious to remar that intestinal pathology was probably at this date (1819) rathe hazy, to say the least; and that the diagnosis proposed above wa not in all likelihood recognised as a possible accident—or i described as a condition found after death, it had not yet bee diagnosed during life.

Most authors insist on intussusception being an accident o early life, and most common in infancy. That this is true nee not be disputed, but that it *does* occur in adult life we now kno to be the fact. It must be allowed, however, that in the case o an octogenarian one would hesitate to admit its probability.

Chronic obstruction there undoubtedly was, though neve complete, for he was dependent upon "opening medicine" t keep him right—and even when obstruction became acute, i yielded to the torrent of cathartics constantly administered fo twenty-four hours, and the bowels were "freely moved." Tha the obstruction was not of a malignant nature, the evidence of it long continuance is sufficient to assure us, even if there had bee no examination after death. What other diagnosis then remains other than what has already been indicated, except we are t suppose several distinct attacks of enteritis—the first occurring i

808 (eleven years before death), a second in 1816, a third in 818, and the last, which proved fatal, in 1819.

Now I think we may venture to say this is not the history of nteritis ; nor again, at *post-mortem* examinations of persons who ave died with symptoms and history at all resembling those of Mr. Hey, is enteritis what we are accustomed to find. Successive ttacks of inflammation of the bowel might have been expected be accompanied sooner or later by peritonitis. But here we ave "no coagulable lymph" and the only evidence of inflam- atory action is adhesion of the transverse colon to the spleen nd diaphragm, *above* the seat of obstruction. The stercoral cers in the distended bag of sigmoid seem to have resulted from e extreme attenuation of the walls, and not from inflammation.

Whatever else was present, I think we are safe in saying that flammation was not, and yet the venerable patient was subjected all the rigours of what was called antiphlogistic treatment. owever much some of us may feel that the revulsion against eeding, which set in in the early fifties, carried us far beyond e demand for reform, and that it is a pity we have not the urage more frequently to resort to the lancet, yet it is difficult ow to realise the prevalence of a doctrine which could warrant e practice of general blood-letting at 82, and, in the same tient, cover the abdomen with leeches at 83, and that, too, here the patient was a proverbially small eater, and had been r many months in a more or less lowered condition by reason his habitual resort to aperients.

Are these data, such as I have been able to submit, enough to arrant me in suggesting that the standpoint from which we take r outlook nowadays in such a case is wholly changed since 19 ?

For blood-letting and aperients we should certainly substitute st, and probably opium. Instead of expectant or let-alone eatment, we should seriously consider the alternative of an ploratory operation.

Perhaps at so advanced an age not even the modern surgeon, ith all his accumulated experience, instrumental aids, antiseptic recautions, and fortified by the most unexceptionable statistics, ould have had the temerity to operate in the last illness ; but at earlier stage this might have been possible.

I feel now, gentlemen, that I have to excuse my own temer in so far departing from ordinary custom as to address you a medical case upon this occasion. Had we met elsewhere would not have been permissible, but I venture to think you allow that in Leeds, where he died full of years and honou where he was practically the founder of her great infirmary, a where, by the delivery of four courses of lectures on anatomy, anticipated by more than three decades the foundation of School of Medicine, it is not too late to recall the name of who was undoubtedly her greatest surgeon.